BOTANY.—New grasses from South America.¹ AGNES CHASE, United States National Herbarium.

Among recent collections of South American grasses received by the U. S. National Herbarium are three undescribed species, one each from Colombia, Uruguay, and Curaçao, one of the Dutch West Indies. Although this island is popularly regarded as one of the Antilles, biologically it belongs with Venezuela.

Stipa rosengurttii Chase, sp. nov.

Perennis, caespitosa; culmi erecti, subfiliformes, 25-85 cm alti; folia basi crebra, vaginis inferioribus dense imbricatis; ligula circa 1 mm longa; laminae involutae, filiformes, 6-12 cm longae, interdum longiores, erectae, hispiduloscabrae vel scaberulae; panicula 4-6 cm longa, ramis erectis, paucifloris; spiculae brevipedicellatae; glumae 3-nerves, acuminatae, marginibus hyalinis; gluma prima 6-7 mm longa, gluma secunda 5-5.5 mm longa; lemma convolutum, 3.3-3.4 mm longum, 1-1.2 mm latum, anguste obovatum, fuscum, tuberculatum, coronatum, infra coronam constrictum, dorso pubescens, callo brevi, longe barbato, pilis lemmate 2-3-plo brevioribus; arista 1.8-2 cm longa, bigeniculata.

A cespitose perennial; culms erect, subfiliform, 25 to 85 cm tall with 2 or 3 nodes above the base, the nodes ascending-pilose or in age glabrescent; leaves crowded at the base, the lower sheaths overlapping and forming a swollen base, the lowermost relatively broad and loose, appressed pilose at the very base between the strong nerves, the middle and upper sheaths glabrous or scaberulous; ligule firm, about 1 mm long; blades involute, filiform, 6 to 12 cm long in the type specimen (to 25 cm in Rosengurtt B 216), erect or nearly so, hispidulousscabrous to scaberulous; panicle long-exserted, 4 to 6 cm long in the type specimen (to 12 cm in Rosengurtt B 216), the few short branches erect, few-flowered, the axis and branches angled, scabrous; spikelets on erect sparsely hispidulous pedicels 1.5 to 3 mm long; glumes firm-membranaceous with hyaline margins, acuminate, 3-nerved, the first 6 to 7 mm long, the second 5 to 5.5 mm long, the delicate apex

¹ Received June 26, 1943.

of both readily breaking off; lemma convolute, 3.3 to 3.4 mm long, 1 to 1.2 mm wide, the callus very short with a dense ring of stiff, white hairs from one third to half as long as the lemma, the body of the lemma narrowly obovate, brown, finely tuberculate throughout, with a line of pubescence on the back extending nearly to the summit, the summit of the lemma smooth, cylindric forming a whitish crown stiffly ciliate to erose, the lemma constricted below the crown; awn 1.8 to 2 cm long, twice geniculate.

Type in the U. S. National Herbarium, no. 1819591, collected in a moist meadow, Monzón-Heber, Estación Juan Jackson, Province of Soriano, Uruguay, December 3, 1942, by Gallinal, Aragone, Bergalli, Campal, and Rosengurtt, PE-5120.

This species, with its dense tufts of filiform blades, narrow panicle, and plump tuberculate lemmas resembles *Piptochaetium*. It belongs in the section Stephanostipa Speg. of *Stipa*.

It is a pleasure to name this species for Dr. Bernardo Rosengurtt, a keen student of the grasses of his country, whose collections in the past few years have more than doubled the number of specimens of Uruguay grasses in the U. S. National Herbarium.

The only other collection known is a taller, overmature specimen, *Rosengurtt* B 216, from Río Negro and Arroyo [?] Palleros, Province of Cerro Largo, Uruguay, January, 1936.

Paspalum curassavicum Chase, sp. nov.

Perenne, dense caespitosum, glabrum, stoloniferum, stolonibus elongatis arcuatis, circa 50 cm longis; culmi erecti, foliosi, 30-40 cm alti, ramosi; vaginae arctae, imbricatae; ligula ciliata, 0.5 mm longa; laminae planae, 4-12 cm longae, 2.5-4 mm latae; racemi 2, conjugati, erecti, 3-3.5 cm longi; rhachis 0.7 mm lata; spiculae solitariae, 2.2-2.4 mm longae, 1.1 mm latae, ovato-ellipticae; gluma secunda et lemma sterile aequalia, 3-nervia; fructus 2 mm longus.

An erect densely cespitose glabrous perennial, with a hard knotted base and brittle arching stolons 50 cm or more long, with erect leafy branches from knotted bases, the stolons compressed or sulcate; culms rather rigid, leafy,

30 to 40 cm tall, only one flowering to 8 to 15 sterile culms, all branching at the middle nodes, the branches erect or nearly so, sometimes in small fascicles; sheaths close, overlapping, the lower two or three with reduced blades from rudimentary to 5 mm long; ligule a ring of hairs 0.5 mm long; blades rather firm, flat, 4 to 12 cm long, 2.5 to 4 mm wide, rather sharp-pointed, sometimes with a few hairs at base; racemes 2, included at base, erect, 3 to 3.5 cm long; rachis 0.7 mm wide; spikelets not imbricate, 2.2 to 2.4 mm. long, 1.1 mm wide, ovate-elliptic, pale; second glume and sterile lemma equal, minutely pointed beyond the fruit, 3-nerved (the midnerve occasionally suppressed); fruit 2 mm long, the tip of the palea enclosed.

Type in U. S. National Herbarium, no. 1762213, collected under tall opuntias, west of Hato, near north coast of Curaçao, February 27, 1940, by Agnes Chase (no. 12282). Duplicate type in the Herbario Nacional de Venezuela, Ministerio de Agricultura y Cría, Caracas.

Known only from the type collection, from soil of disintegrated coral and shells. Only a small colony of overmature plants found. It is possible that in a favorable season inflorescences may be more plentiful. The species belongs in the Disticha group, related to *Paspalum vaginatum* Swartz and *P. distichum* L. It differs from both in its cespitose erect habit and arching stolons, in the ciliate ligule, and in the smaller spikelets.

Paspalum reclinatum Chase, sp. nov.

Annum, glabrum; culmi decumbentes, ramosi, 50-65 cm longi, compressi vel sulcati; vaginae laxae, subcompressae, glabrae vel marginibus obscure pubescentibus; ligula circa 0.2 mm longa; laminae planae, flaccidae, patentes, 3-9 cm longae, 4-8 mm latae; racemi 8-13, maturitate patens vel reflexi, 1-2.5 cm longi; rhachis 0.7-1 mm lata, apice spiculam gerens; spiculae solitariae, vix imbricatae, 2.5-2.7 mm longae, 1-1.1 mm latae, lanceolato-ellipticae, glabrae; gluma secunda et lemma sterile aequalia, tenuia, 3-nervia, fructum superantia; fructus pallidus, laevis.

A decumbent, straggling, annual, glabrous as a whole; culms rooting at the lower nodes, 50 to 65 cm long, bearing a few flowering branches nearly as long as the primary culm; culm compressed or grooved; sheaths rather loose, subcompressed, glabrous or very obscurely pubescent along the margin; ligule about 0.2 mm long; blades flat, thin, spreading, 3 to 9 cm long, 4 to 8 mm wide, rounded at base, abruptly acuminate, glabrous or very obscurely puberulent back of the ligule, the margin scaberulous; racemes 8 to 13, at maturity spreading or reflexed on a flattened axis, 6 to 7 cm long, the racemes 1 to 2.5 cm long; rachis 0.7 to 1 mm wide, minutely pubescent at the base and with a spikelet at the apex; spikelets solitary, approximate but not imbricate, pale to faintly yellowish, 2.5 to 2.7 mm long, 1 to 1.1 mm wide, lanceolate-elliptic, glabrous; glume and sterile lemma loose, very thin, 3-nerved, slightly exceeding the fruit; fruit about 2.2 mm long, pale, smooth and shining.

Type in the U. S. National Herbarium, no. 1795921, collected in Colombia, Dept. Cauca; Cordillera Occidental: Cerro de Munchique, Hoya del Río Tambite, 2,000–2,500 meters altitude, July 16, 1939, by E. Pérez Arbeláez and J. Cuatrecasas (no. 6211).

This species belongs in the Dissecta group, and resembles *Paspalum prostratum* Scribn. & Merr. It differs from that in being glabrous as a whole, in the narrower rachis with a spikelet at the apex, and in the slightly larger spikelets, with the loose glume and lemma exceeding the fruit.